



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,266	04/22/2004	Atsushi Koyama	P25239	6444
7055	7590	07/21/2006	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			O HERN, BRENT T	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/829,266

Applicant(s)

KOYAMA ET AL.

Examiner

Brent T. O'Hern

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3 July 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 2-6 and 9-11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims

1. Cancellation of claim 1 and addition of new claim 9-11 in Applicant's Paper filed 3 July 2006 is acknowledged.

Foreign Priority

2. Applicant's claim of foreign priority is acknowledged.

WITHDRAWN OBJECTIONS

3. The Objection to the Abstract of record in the Office Action mailed 3 March 2006, page 2, paragraph 2, has been withdrawn due to Applicants arguments.

WITHDRAWN REJECTIONS

4. The 35 USC 112 rejections of claims 1-6 of record in the Office Action mailed 3 March 2006, page 2, paragraph 3, have been withdrawn due to Applicant's amendments in the Paper filed 3 July 2006.
5. The 35 USC 102 rejections of claims 1-6 of record in the Office Action mailed 3 March 2006, page 7, paragraph 4, have been withdrawn due to Applicant's amendments in the Paper filed 3 July 2006.

NEW REJECTIONS

35 U.S.C. 112, First Paragraph Rejections

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 2-6 and 9-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the **enablement** requirement. The claim(s) contains subject matter

Art Unit: 1772

which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claims 9 and 10, it is unclear where the second cavity, part to be punched out, concave portion and planar ring are located, and how the first inner wall surface's diameter can be substantially equal to a diameter of an inner wall surface of the first cavity.

35 U.S.C. 112, Second Paragraph Rejections

7. Claims 2-6 and 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase **“diameter of the inner wall surface of the first cavity”** in claim 5, line 4 is vague and indefinite because it is unclear to one of ordinary skill in the art what is meant by “diameter of the inner wall surface of the first cavity”. It is unclear how an inner wall can have a diameter.

The phrase **“a cylindrical ring protruding from a rim of the temporary center hole in a surface on a first surface side the cylindrical ring”** in claim 6, lines 2-4 is vague and indefinite because it is unclear to one of ordinary skill in the art what is meant by “a cylindrical ring protruding from a rim of the temporary center hole in a surface on a first surface side the cylindrical ring”. It is unclear how it is possible for a ring to protrude from a rim.

The phrases **“a first cavity formed in a circular planar form”** in claim 9, I. 3 **“a second cavity formed in the first surface at a position corresponding to the first cavity”** in claim 9, II. 4-5 and **“the second cavity being formed on either side of a**

Art Unit: 1772

part to be punched out” in claim 9, I. 5 are vague and indefinite because it is unclear to one of ordinary skill in the art whether a planar form means the first cavity is in a plane, is formed by an apparatus or something else; what is at a position corresponding to the first cavity - whether the second cavity is next to the first cavity, the first surface is next the first cavity or something else; and it is unclear where the punched out part is located where are the sides of the part that the second cavity are on either side of.

The phrase **“first inner wall surface vary proportionately to a distance between the points on the second inner wall surface on the base surface”** in claim 10, II. 6-8 is vague and indefinite because it is unclear to one of ordinary skill in the art what is meant by “first inner wall surface vary proportionately to a distance between the points on the second inner wall surface on the base surface”. It is unclear what about the first inner wall is varying and what the reference to the points on the second inner wall surface are referring to.

Clarification and/or correction is required.

35 U.S.C. 102(b) Rejections

8. Claims 9, 2-6 and 11 are rejected under 35 U.S.C. 102(b) as being unpatentable over Tanaka et al. (US 5,541,910).

Regarding claim 9, Tanaka ('910) teaches an information medium preform (*FIG-1, #1 wherein the product is capable to be used as a preform*) comprising a first surface (*FIG-1, top surface of #1*) and second surface (*FIG-1, surface with cavity defined by $r1$ and $r4$*);

a first cavity in the second surface (*FIG-1, cavity with radius $r1$*); and

a second cavity in the first surface (*FIG-1, cavity with radius $r4$*),

Art Unit: 1772

wherein the second cavity comprises a first concave portion (*FIG-1 and col. 4, ll. 9-19 wherein #4 fits within concave recess, in a circular and vertical dimension above r4*), the first concave portion comprising:

a first inner wall surface whose diameter is substantially equal to a diameter of the first cavity (*FIG-1, wherein the diameter of #4 is equal to the diameter of the cavity of the recess within #22*); and

a base surface substantially transverse with the first inner wall surface (*See FIG-1 wherein the base below #4 is clearly transverse to the first inner wall surface and transverse with each other.*).

Regarding claim 2, Tanaka ('910) teaches the recording medium preform wherein a corner formed by converging the first inner wall surface and the first surface is beveled (*See col. 4, l. 11 wherein the surface is "tapered", thus beveled.*).

Regarding claim 3, Tanaka ('910) teaches the recording medium preform wherein the second cavity comprises a depth from 50 to 150 μm (*See col. 3, ll. 32-34 and FIG-1 "h" wherein the maximum height is 0.5 mm/500 μm .*).

Regarding claim 4, Tanaka ('910) teaches the recording medium preform wherein the first cavity comprises a second portion in a base surface of the first cavity along the inner wall surface of the first cavity (*FIG-1, bottom portion of cavity wall r1 and col. 3, l. 66 to col. 4, l. 28*).

The phrase "the base surface of the first cavity being constructed of a surface of the part to be punched out on a second surface side" in claim 4, lines 5-6 are not given any patentable weight since the applicant is introducing **use limitations** into the product claims (see MPEP 2173(q)).

Regarding claim 5, Tanaka ('910) teaches the recording medium preform wherein the temporary center hole is formed in a central part of a part to be punched out (*See FIG-1, #3 and #4 at center.*), the temporary center hole comprising a smaller diameter than the diameter of the first cavity (*FIG-1, wherein the diameter of the beveled portion $r1$ and smaller than $2*r2$.*).

Regarding claim 6, Tanaka ('910) teaches an information recording medium preform comprising a cylindrical ring protruding from a rim of the temporary center hole in a surface on a first surface side (*See FIG-1, ring defined by base area supporting #4 and col. 3, ll. 66 - col. 4, l. 28.*), the cylindrical ring comprising a central axis that is coincident with a center of the temporary center hole (*FIG-1, wherein the axis are along the center of #22*).

The phrase "of the part to be punched out" in claim 6, line 3 is not given any patentable weight since the applicant is introducing **use limitations** into the product claims (see MPEP 2173(q)).

Regarding claim 11, Tanaka ('910) teaches an information recording medium preform wherein the first concave portion comprises the first inner wall surface of the second cavity (*See Fig-1 the outer surface of $r4$ butting #2.*), an outer circumferential surface of the cylindrical ring, and a base surface, the base surface converging with the first inner wall surface and the outer circumferential surface of the cylindrical ring (*See FIG-1 and col. 3, l. 66 to col. 4, l. 30*).

35 U.S.C. 103(a) Rejections

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 5,541,910) in view of Takahashi et al. (US 5,859,834).

Regarding claim 10, Tanaka ('910) teaches an information recording medium preform wherein the first concave portion comprises a second inner wall surface that converges with the base surface of the second cavity (*See FIG-1 wherein the base surface supporting #4 converges with the cavity defined by r4.*), the second inner wall surface being located between the first inner wall surface of the second cavity and an outer circumferential surface of the cylindrical ring (*See FIG-1 wherein the second inner wall surface supporting #4 is between the outer ring bottom side of #2 when viewed from top to bottom.*), however, fails to expressly disclose wherein the second inner all surface is tapered.

However, Takahashi ('834) teaches wherein the second inner all surface is tapered (*See FIGs 8 and 11 and col. 7, ll. 1-36, wherein inner wall surface #105a is tapered.*) for the purpose of accommodating a complimentary secondary surface (*col. 6, ll. 27-33 and col. 3, ll. 18-23*).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to modify Tanaka's ('910) product with a second inner all surface being tapered as taught by Takahashi ('834) in Tanaka ('910) in order to provide a product that accommodates a complimentary secondary surface.

ANSWERS TO APPLICANT'S ARGUMENTS

10. In response to Applicant's argument (*p. 8, para. 2*) that Tanaka ('910) does not teach newly added claim 9, it is noted that Tanaka ('910) teaches an information medium preform (*FIG-1, #1 wherein the product is capable to be used as a preform*) comprising a first surface (*FIG-1, top surface of #1*) and second surface (*FIG-1, surface with cavity defined by r1 and r4*); a first cavity in the second surface (*FIG-1, cavity with*

radius $r1$); and a second cavity in the first surface (FIG-1, cavity with radius $r4$), wherein the second cavity comprises a first concave portion (FIG-1 and col. 4, ll. 9-19 wherein #4 fits within concave recess, in a circular and vertical dimension above $r4$), the first concave portion comprising: a first inner wall surface whose diameter is substantially equal to a diameter of the first cavity (FIG-1, wherein the diameter of #4 is equal to the diameter of the cavity of the recess within #22); and a base surface substantially transverse with the first inner wall surface (See FIG-1 wherein the base below #4 is clearly transverse to the first inner wall surface and transverse with each other.).

11. In response to Applicant's argument (p. 8, paras. 3-4) that Tanaka ('910) teaches an optical disk, not a preform as claimed in claim 9, it is noted that patentability of Applicant's product is determined by the structural limitations of in Applicant's claims, not a stated use of the product. Furthermore, Tanaka ('910) teaches all of the limitations of Applicant's claim 9 as discussed above. Furthermore, Tanaka's ('910) product can clearly capable of being used as a preform.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1772

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-2172. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Brent T O'Hern
Examiner
Art Unit 1772
July 18, 2006


NASSER AHMAD
PRIMARY EXAMINER 7/18/06